BULLETIN *of The* BUSINESS HISTORICAL SOCIETY
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HENRIETTA M. LARSON, *Editor*
Vol. XIII, No. 1 January, 1939 *Whole No. 76*

Need for a Journal of Business History

There was once a *Journal of Economic and Business History* published by the Business Historical Society and the Harvard Graduate School of Business Administration. Four bound volumes and an extra supplementary volume are on the shelf before us. They represent the combined efforts of many scholars in America and Europe. The depression caught the *Journal* only part way up the hill and sent it down again. Countless letters have come in to ask why we do not start up again or when the *Journal* will be reestablished. Just today such an inquiry came from a government bureau in Europe.

When the *Journal* is revived, it will be as the Journal of Business History. It will be devoted to a study of the policy and management that have gone into business through the ages. It will set forth the general circumstances that have been favorable or unfavorable to business enterprise. We may expect that progress will be slow in any effort to correct the ignorance, neglect, and perversion of four thousand years.

Let us keep the aims clearly in mind, though we need not bother about expressing every last hope:

1. To put business into the general picture that faces the historian.

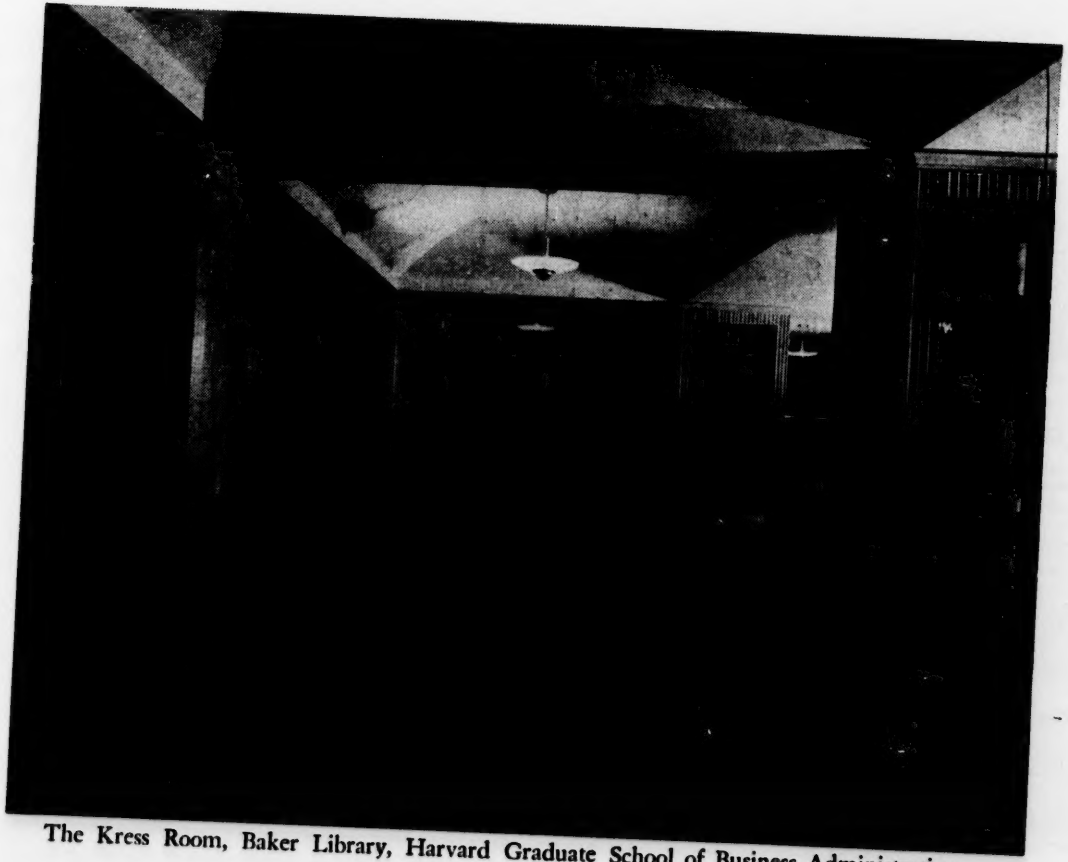
2. To make clear to all the nature of the problems that business men have had to meet.
3. To indicate how these problems have been solved.
4. To give information to scholars that will fill a great void in our knowledge as to the evolution of actual business management.
5. To stimulate scholars to work in the field of business history in their own way and in their own locality by offering them an opportunity to publish the results of their findings.
6. To set forth facts and opinions on the subject of business accomplishment and then to let these facts and opinions tell what general story they will.
7. To help make business more professional in the sense that business men will know their part and become conscious of their position in a group and conscious of the position of their group among groups.
8. To explore further the neglected philosophy of individual human endeavor, planning, management, and control.
9. To contribute to a better understanding of the conditions under which private enterprise and private initiative can flourish and by flourishing offer security and opportunity to our people.

Business History and the Kress Library

An address delivered by Dr. Arthur H. Cole
at the annual meeting of the Society.

The addition to the Business School Library of the Kress collection on business and economics presents as great an opportunity and challenge to the business historian as it does to the student interested in economic or politico-economic history. Here, for the first time at Harvard, is available a large collection of writings extending back to the dawn of printing, which have never been extensively surveyed from the particular viewpoint of the business historian.

The collection, and the room in which it is housed, come to us through the generosity of Mr. Claude Washington Kress, of New York City. The books and pamphlets themselves, to the number in excess of thirty thousand, were assembled in his lifetime by Professor H. S. Foxwell, of Cambridge, England. They

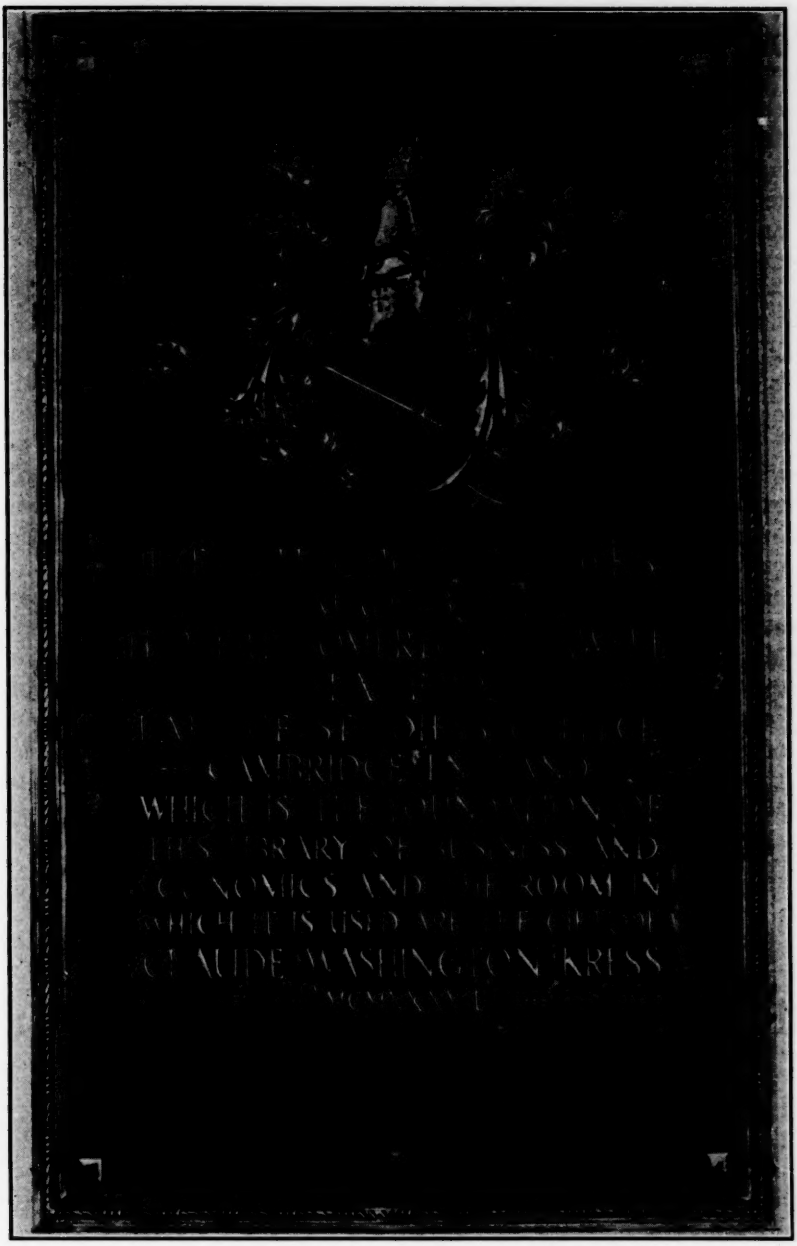


The Kress Room, Baker Library, Harvard Graduate School of Business Administration.

relate primarily to the period before 1850, and are particularly numerous with respect to English, French, and Italian writings. To this initial collection has been added material of a similar date that already existed on our shelves, and to it have been added several hundred corresponding items from the collections of the Harvard College, Harvard Law School, and Boston Public libraries, while extensions are being made constantly through the purchase of further pieces from the rare-book dealers. In sum, then, the Kress Library is a real focal point at Harvard for material dealing with the business and economic development to the point in time when the collection in our ordinary stacks can carry on. In Dean Donham's phrase, the Kress collection provides the roots for the material which over the past twenty-five years has been assembled in the Library of the Business School.

It is difficult in a few words to picture the scope and depth of the Kress collection. It extends from the earliest writings in the field of accountancy, such as Pacioli's treatise, to the manuscript letters of an Exeter banker doing business with a London principal, and from a first edition of Malynes' *Lex Mercatoria* to Playfair's *Commercial Arithmetic* (in which the graphic treatment of statistical data was first attempted). For the most part, these materials have not been examined for their business-history significance. I, myself, have had occasion to touch upon a controversy of the latter seventeenth century between clothiers and factors in the operation of Blackwell Hall at London—for which controversy I located a dozen or more books and pamphlets in the Kress Library. Professor Schmalz has been interested in the methods and morals of retail merchants of England in the seventeenth and early eighteenth centuries, and for him quite casually we have located a number of titles, including William Scott's *Essay of Drapery, or The Compleate Citizen, Trading Justly, Pleasingly, Profitably* (1635), de Britaine's *Human Prudence: or, the Art by which a man may raise himself and his fortune to Grandeur* (11th ed., 1717), and several editions of Defoe's *Complete English Tradesman* (1726 and later).

The other day I chanced upon a single item of 1641 which is worth anaylsis for its relation to the present-day conditions, entitled *A True Discovery of the Projectors of the Wine Project.* It pertains to a scheme whereby the drawing vintners of London set up their own company to act as tax collectors for the King. Each quart of wine sold at retail by these vintners carried a "sales tax"



Dedicatory Plaque at the Entrance of the Kress Room.
The ornamental headpiece is based upon
coats-of-arms of the Kress family.

of a penny or twopence, which was to be collected by the company. The latter paid to the King an aggregate sum of £37,000 a year. In return for this arrangement beneficial to the King's pocketbook, these London vintners desired to step in between the importing merchants and all retailing vintners in other parts of the Kingdom, to be permitted to "dresse and sell Victuals, Beare and Tobacco," and to have their competitors, the coopers, restrained from buying or selling wines.

It is the hope of Mr. Kress that this collection will not be utilized for antiquarian or similar purposes. To his mind the material *can* be utilized for the service of present and future generations, believing that one is able to learn from the experiences of the past of at least *some* mistakes that may be avoided. Perhaps more in business history than elsewhere we need a broad investigation of the development of business functions, and an analysis of business experience in the long period covered by the Kress Library. This investigation needs to be guided by an appreciation of modern business structure and operation, and the results should be interpreted with an appreciation of modern business problems. Probably at no place in the country, if in the world, is there the happy conjuncture of possibilities that exists at Harvard, with its group of specializing business historians, with its excellent staff of teachers concerned with modern business, and with its complement of neighboring libraries to supplement the Kress collection in cognate fields of law, of politics, of technology. As I said at the beginning, the advent of the Kress Library brings an exceptional opportunity and an exceptional challenge.

ARTHUR H. COLE

An Engineer Writes on Railroad Construction Standards in 1842

George Washington Whistler, the father of the artist, ended his civil engineering career as consultant to the Russian Czar after a life of distinguished service in the planning and construction of pioneer American railroads, including the Baltimore & Ohio and the present Boston & Albany. A graduate of the military academy at West Point, he was one of that early group of soldier-engineers, including Captain William Gibbs McNeill (his brother-in-law),

who contributed largely to the development of early railroad practice in the United States. He died at St. Petersburg in 1849, two years before the first great Russian project—the Petersburg-Moscow line—was opened for traffic. It was while he was abroad that the son had his short career as a West Point cadet, which was a trial to himself, to his mother, and to Robert E. Lee, then superintendent of the Academy.

Mr. Ralph Budd, the president of the Chicago, Burlington & Quincy Railroad, has recently presented to the Business Historical Society a photostatic copy of one of the important reports made by George Washington Whistler on the technical aspects of the proposed railroad. The original lies in the State Archives of the Russian government.

The report, here reproduced in full, deals with the technical questions of the gauge of the track and of the type of rail to be used on the projected railway. Whistler supports a moderately narrow (five feet) gauge although one wider than that used on most railroads in America and elsewhere. Obviously these were not the only important technical problems to be decided, but they presented basic questions which must be settled before anything else was done. In the light of present-day emphasis on high speed, Whistler's limit of 35 miles per hour is especially interesting.

The report has a significance beyond the technical points with which it is concerned; in a real sense it illustrates some of the methods of early railroad construction and management. Railroad builders and administrators were forced to make decisions and to act in a field where scientific and business knowledge and experience were in reality in process of development. Indeed, the engineers were experimenters and empiricists par excellence.

HOMER B. VANDERBLUE
Harvard University

St. Petersburg, September 9th, 1842.

To His Excellency
The Count Kleinmichel
Aid de Camp General, etc. etc. etc.

As it is important that the question of width or "guage" of track, and the form and weight of the iron rails to be used on the St. Petersburg and Moscow Railroad should be determined as soon as possible, I beg leave to submit the following remarks and recommendations. —

The "Guage" of the track of almost all the railroads in Europe and America with some few exceptions is uniform, and 4 feet 8½ inches.—and however arbitrarily these particular dimensions may have been fixed upon originally, experience I believe has shown no sufficient cause for any material change.—having been adopted on the earliest roads in England. its *precise* dimention continued from the necessary connections in the extension of the system, and I believe the question of altering it was not made until a very material increase in width was adopted in the construction of the Great Western Railroad in that country—since when it has frequently been the subject of investigation and discussion.—All have agreed that the original guage of 4 feet 8½ inches is narrow enough; the question has therefore been confined entirely to an increase, and the advantage to be derived from this increase is generally stated to be.—An increased speed, beyond that heretofore acquired on roads of the ordinary guage, and this to be attained.—

1st By the mechanical advantage, or diminution of friction by increasing the diameter of the wheels, which may be done with wider guage without raising the bodies of the carriages.—

2nd Greater stability to the carriages on the track and consequent greater steadiness of motion, and

3rd Increased facilities for the adoption of large and more powerful engines necessary for the anticipated increased speed.—

In relation to this anticipated increased speed, the experiments instituted to aid in the investigation of this question and reported upon by Mr. Nicholas Wood, an eminent English Engineer, clearly show that any such extraordinary speed is acquired only by a very great sacrifice of power, and it seems to me there can be little doubt that the rapid increase of resistance with the increase of speed must lead to the conclusion that it is not advisable to attempt an extreme rate of speed, and in my opinion 30 to 35 miles an hour may be considered as the limit of practical speed for passenger trains, with due consideration to economy and a proper accommodation of the public.—this rate of speed is attained on roads of the ordinary guage with the same facility as on those of wider guage—and may be increased if thought advisable.—

In reference to the mechanical advantage to be attained by increasing the diameter of the carriage wheels.—it is true there will be a diminution of friction with the increase of the diameter of the wheels, but I have no reason to believe that raising the body of the

carriage within the limits of a practical increase of the wheel would effect the result.—while on the other hand, I do not think it would be advisable to increase the wheels beyond the ordinary practice for such a purpose, since the small advantage thus to be attained in the diminution of friction would be at the expense of heavier wheels and axles for equal strength, and in my opinion increase of speed had better be acquired if necessary by an expenditure of power as a greater means of security against accident; for large wheels cannot be made so strong as small ones—

In relation to the greater stability of the carriages on the wide guage and consequent increased steadiness of motion.—This is so dependent upon the construction of the carriages themselves, and the manner in which they may be connected together in the trains, that I cannot see what effect the guage (within practical limits) can possibly have upon it—the experiments on this head, have not shown any advantages of the wide over the ordinary guage.

In relation to the last mentioned advantage, viz—the facilities for adopting larger and more powerful engines—I can only say the result of my experience, and the opinion of all the builders with whom I have conversed, goes to show that an increased width of guage is not necessary to this end—since engines may be, and have been constructed for roads of the ordinary guage, of the maximum weight, and consequent power—due to the capacity (strength) of any rails now in use—and to increase the engine power beyond this would involve the necessity of an increase in the weight of the rail which I believe to be unnecessary in this case, as I have no doubt engines may be constructed for the ordinary guage of sufficient power to draw the maximum practically manageable train.—

The objections to a material increase in the guage beyond that in general use are—

1st That the necessary increased weight of the carriages consequent upon increased length of axles, which must also be increased in diameter to preserve equal strength, not only increases the cost, but the proportion of weight of cars to goods carried, which upon a road like this between St. Petersburg and Moscow intended as it is for the transportation of large quantities of goods should be avoided as much as possible.—

2nd A material increase of guage involves an increased cost in the formation of an increased width of road bed—the precise amount of which I am not at present prepared to say—but it is

evident that in a line of such extent as this [420 miles] it must be very considerable.—

These are the principal disadvantages of an increased guage as immediately applicable to the St. Petersburg and Moscow Railroad, and I think it must be admitted that they are not met by any equivalent advantages.—I would therefore recommend—that five feet be adopted as the width or "guage" of the track.—

I have adopted the additional 3½ inches, because it is not necessary in this case to adhere to the precise dimention of 4 feet 3½ inches for the purpose of connecting with other roads of that guage, and because it is too small an increase to effect materially the important question of cost—and will be available for convenience in the construction of Engines.—

The form and weight of the iron rail.—

It will be unnecessary here to repeat all that has been said on the various forms and weights of rails—the question has always been one of much importance, and early became the subject of scientific investigation, from which the general form for maximum strength has been deduced and confirmed by experience being generally adopted with such modifications as the peculiar mode of fastening seemed to require;—this form for maximum strength is that given to what is usually called the T rail.—

In the arrangement of the exact form of the section of this rail, there are practical causes governing the distribution of the metal in addition to the more important one of maximum strength;—one of these is, that whatever the general form or weight of the rail, the "head" or upper bearing part should have some certain dimentions and weight with reference to the effect of the wheels moving over it aside from its duty as a part of the rail for supporting the weight;—another, is the peculiar form to be given to the bottom web with reference to its steadiness in the chair or other mode that may be adopted for its fastenings.—

In England and in Europe generally the rails are secured by means of cast iron chairs fastened to stone blocks or wooden sleepers at each bearing point, and for this purpose the bottom web is made not over 1½ to 2 inches wide and rests in the chair, secured by iron or wooden keys.—

In America generally, the rails rest immediately on the stone block or wooden sleepers without the intervention of cast iron chairs—except at the end of each rail, where, the better to secure the relative position of the ends of the two rails, they are made to

rest on a cast iron plate—the whole being secured to the sleepers by iron spikes.—for this purpose the bottom web of the rail is extended in width sufficient to give a firm bearing on the sleeper without the aid of a chair, by which means the weight of the chair is applied to give strength to the rail—the result of my own experience and the opinion generally among engineers where this mode has been used has led me to the conclusion that this form of rail (called in America the H rail), and mode of fastening, gives at least equal, if not greater stability—greater simplicity and economy than any other. I would therefore recommend that this form be adopted.—

In relation to the weight of the rail, as this is a question of strength and has been the subject of direct experiment—it is dependent (within certain practical limits) upon the length of bearing, or distance between the supports, and the weight upon any one pair of wheels to pass over it;—the practical limit for the distance between the bearings is assumed to be between 3 and 5 feet and the question then is between the economy of an increased weight of iron in the rails for a long bearing, or increased number of supports for the shorter—and I have decided, as the case is similar to America, that the wooden sleepers will be cheaper than the iron rails;—and as the weight upon any one pair of wheels to pass over the rail need never exceed eight tons I would recommend, that the weight of the rail be established at sixty pounds to the yard—to be supported at intervals of every three feet.—

Which is respectfully submitted by your Excellency's

Most Obt. Servt.

GEORGE W. WHISTLER

From the Maryland Archives

The edifice occupied by the Hall of Records at Annapolis was completed only in 1935. Its erection was made possible as part of the Tercentenary Celebration of the State of Maryland. The Land Office was given quarters in the building and moved in during the early part of 1935. The Hall of Records, proper, was opened on October 1, 1935, at which time the present writer, the first archivist of Maryland, entered upon his duties.

Many materials were transferred to the Hall from the Land Office, which now has charge only of Land and Chancery Records, in addition to its work relative to lands. All other State records

have their proper place in the Hall of Records. Among materials transferred by the Land Office were old wills, administrative accounts, inventories of deceased persons, testamentary proceedings, and a number of other records, among which are about three hundred volumes of old account books of various concerns. These last form a very valuable group of records, for from them one can form an interesting chapter, or indeed many chapters, on the economic history of Maryland.

Among these materials are 23 volumes showing operations of the Cornwall Furnace (1752-1766), located in Pennsylvania; 13 volumes relative to the Hopewell Forge—probably located in Pennsylvania—there were a number of forges so named (1753-1764); and 24 volumes relative to the Elk Forge Co. (1798-1839). Since the early iron history of Maryland is very important, these three series should be exploited.

Another important series consists of the various account books (ledgers, order books, sales books, journals, tobacco shipments, waste books, bills of lading, bills payable and receivable, letter books), in all 28 volumes covering the years 1771-1805 of the company of Wallace, Davidson & Johnson. The firm name became Wallace, Johnson & Muir some time before 1805, or there may have been two distinct companies. The company had a London office and sold tobacco and other products on consignment for Maryland planters. The letter books containing copies of letters written from London during the period 1771-1777 (when the London agents returned to Maryland) are most interesting. They give not only considerable information relative to Maryland business, but, as affairs between the mother country and the American colonies became strained, much information on affairs of Parliament. It is hoped at some time in the future to publish all these letters.

In addition to the above are 2 volumes showing debts owing William Mollison, merchant of London, by citizens of Maryland (1770-1786). He also had a store in Georgetown, then a Maryland town. There is a ledger for administering the estate of William Digges of Prince George County (1783-1792); 7 account books of the company of Douglass & Smoot (1783-1799); 1 account book of John Voorhees & Co., Kent County (1785-1786); 3 account books of Jesse Richardson, Talbot County (1789-1794); 1 book of Zachariah Maccubbin, Baltimore County (1789-1801); 7 books of John Hollins (1790-1803); William and John Taylor of Pigg Point are represented by 6 books (1790-1801); Hodges & Estep, "Pig" Point,

7 books (1801-1818); Seth Barton & Co., Baltimore, 12 books (1791-1803); Briscoe & Partridge, Baltimore, 9 books (1806-1823); P. A. Karthaus, Baltimore, 17 books (1817-1832); Clifton Factory—Peter Gough & Co., St. Mary's County, 5 books (1815-1830); Kerby & Ready, Baltimore, 40 books (1816-1846); Williams & Stinchcomb, Frederick County, 4 books (1818-1823); Wilson & Ayers, Baltimore, 2 books (1821); Touque & McPherson, Tracey's Landing, 9 books (1823-1834); Baltimore & Rappahannock Steam Packet Co., 5 books (1830-1847); William B. Trump & Co., 2 books (1838-1843); Ohio Insurance Co., 2 books (1843-1847); Farmer's National Bank, Annapolis, 7 books (1810-1912, not continuous).

In addition to the above, there are various scattered account books. All told, the collection, considering the various branches of business concerned, is not without valuable information to the investigator of social and economic conditions in Maryland, especially for the late eighteenth and nineteenth centuries. There are also in the Hall a number of public account books, several showing negotiations between the State of Maryland and the United States during the American Revolution, intendants' account books, etc., besides modern account books of the Maryland State Treasury and books of a similar nature.

James A. Robertson
Archivist, Hall of Records
Annapolis, Maryland.

Business Enterprise in the American Revolution

As students continue to re-work the field of American history, they turn up a great variety of new material. Some of it is of limited significance—the sparse gleanings that one expects to find where many careful reapers have been at work. But some of it is rich and important, as unexplored aspects of the past attract attention; and this is especially true of the growing knowledge about business in America's development. It is a striking paradox that while private enterprise was overwhelmingly dominant in American life, historians gave it not the slightest heed; but now, in a period when that dominance has definitely waned, historians are devoting an increasing amount of attention to the rôle of business in the growth of the nation.

One of the latest results of efforts in this direction is Dr. Robert A. East's *Business Enterprise in the American Revolutionary Era.*[1] Dr. East set himself the task of discovering why there was a relatively sudden surge of big business and corporate enterprise following the War of Independence. Using evidence from a truly impressive number of manuscript collections, together with a fairly exhaustive examination of published material, the author has done a staggering amount of research and has made a substantial contribution to our knowledge.

By the eve of the Revolution the colonists had accumulated capital which could be used in new ventures. Some of it belonged to large landowners, a limited amount was held by lawyers, ministers, and other professional men, and a great deal belonged to merchants —men engaged in a variety of business activities which extended far beyond their local environment. While the bulk of this accumulated wealth was employed in commerce, men were beginning to put money into land speculations, marine underwriting, and crude manufacturing ventures. But such investments had been made directly by the investors themselves, through the medium of personal loans, notes, and mortgages. Business enterprise was still on a small scale and almost entirely on an individual or partnership basis. The main factors hindering its advance were the lack of leadership for large undertakings, restrictions imposed by British mercantilist policy, and hostility on the part of many colonials toward mercantile activities—an attitude which is inevitable in any agrarian population.

The Revolution changed all that. Old ties and attitudes were weakened, young men found new opportunities to forge ahead in business enterprise, and the whole colonial area bustled with new activity. With Imperial restrictions thrown off, men opened trade with Sweden, France, and Holland, and expanded that with the West Indies—new markets to replace the vanished commerce with Britain. The war required food, clothing, and other supplies in quantities which the existing industrial and commercial structure of the colonies could not provide, and merchants organized locally and nationally to meet the new situation. Public loans had to be floated to support greatly increased government expenditures. A thirst for wealth and speculation swept through the land, as it always does in times of rapid change and emotional stress.

[1] New York: Columbia University Press, 1938. Pp. 387. $4.25.

By the end of the war such prominent merchants as Robert Morris and Jeremiah Wadsworth had advanced to positions of national leadership, business men generally had learned to coöperate effectively in large-scale ventures on a highly organized basis, new mechanisms for investment were in operation, and the institutionalization of business activities was proceeding apace. Business interests, moreover, had surmounted radical and rural opposition to gain control of the political scene. The way was open for such large undertakings as banks, turnpike construction, manufacturing, and land companies. The nation was ripe for the economic philosophy of Alexander Hamilton.

It is good to have this story worked out in considerable detail, and it is even better to obtain a glimpse of supply operations during the war. To many readers, indeed, the material on trade in supplies and government contracts will be regarded as the author's most significant contribution. It is evident that private business played a major part in bringing about victory. One could almost conclude (though the author might not agree) that fortunes changed for the better as soon as Morris, in 1781, arranged the handling of commissary contracts to permit merchants to make a profit. At first glance the supply dealings may seem to be a sordid tale of profiteering and scheming, but there is no evidence to indicate that the profits made were excessive. The statements made refer to gross profits, before deducting expense, and considering the difficulties and risks involved, they may have been reasonable indeed. At any rate, the whole subject of supplies is interesting and important, and its scope is sufficiently large to provide a number of scholars with hard work for years to come.

There are opportunities in other directions, too. Dr. East has presented us with a sketch of the effect of the Revolutionary War upon the general structure of business, showing the growth of mobile capital, increased use of credit instruments, and emergence of important coteries of merchants connected by business interests and family ties. There is a definite need for deeper probing at many points, so that we may know what was happening inside individual concerns as well as on the outside—changes in internal organization, problems, managerial techniques, and results. In short, we need a large number of individual firm histories to test Dr. East's thesis and to complete our knowledge of the period.

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